

Abstract

The objective of this research is to study, analyze and evaluate wide code division multiple access (WCDMA) systems for non linear mobile satellite channel in urban .area

The impairments taken into consideration in the system are: nonlinear effect of Travelling Wave Tube Amplifier (TWTA) on-board satellite (AM-to-AM and AM-to-PM conversions), additive white Gaussian noise (AWGN), and mobile propagation channel which include Rayleigh .effect, to describe propagation in urban area

System performance in term on the error probability .is obtained using mat-lab software program

The results were obtained in graphical form for different Signal to noise ratio (SNR) and different input .(back off (IBO